



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/798,468	03/11/2004	Steven M. Betker	QN1072.US	6100
22145 7590 12/23/2008 KLEIN, O'NEILL & SINGH, LLP 43 CORPORATE PARK SUITE 204 IRVINE, CA 92606				
EXAMINER HARPER, KEVIN C				
ART UNIT		PAPER NUMBER		
2416				
MAIL DATE		DELIVERY MODE		
12/23/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/798,468

Applicant(s)

BETKER, STEVEN M.

Examiner

Kevin C. Harper

Art Unit

2416

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 November 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 10-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 10-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-85/86)
- Paper No(s)/Mail Date 8/08, 11/08
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(c), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(c) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 20, 2008 has been entered.

Response to Arguments

Applicant's arguments filed November 20, 2008 have been fully considered but they are not persuasive.

1. In response to applicant's argument that Ebata is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Ebata discloses transmission of packet data through a network from a source to a destination with the intent of optimizing the data transmission based at least in part on the number of hops away from a destination.
2. In response to applicant's argument that there is no suggestion to combine the references and that Ebata teaches away from the present invention, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of

ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Ebata is directed to providing data to an end node in such a fashion that optimizes data throughput through queuing based on hop counts (para. 8).

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-4 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

3. Regarding claims 1-4, the method recites that no virtual lane is assigned if the frame is destined for another port of the fibre channel element. However, the specification does not describe this limitation. Conversely, the specification describes frames destined for another port of the fibre channel element being assigned to a virtual lane (paras, 89, 91, 93 and 110; note: a frame received at a receive port is sent to a transmit port where is assigned a virtual lane (figs. 3-4)).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Susnow et al. (US 2002/0159385) in view of Ebata (US 2003/0174652).

4. Regarding claim 1, Susnow discloses a method of a switch element for processing fibre channel frames (para. 24) comprising assigning a first virtual lane to a frame (para. 38), determining if the assigned virtual lane has a credit (para. 49) and transmitting a frame if a credit is available (para. 38, last five lines). The virtual lanes correspond to a source and a destination (para. 46, lines 1-4).

5. However, Susnow does not disclose assigning virtual lanes based on a hop count. Ebata discloses queuing based on a hop count (para. 9) based on a destination identifier value (para. 31; note: destination address determines hop count - fig. 3). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have a virtual lane (i.e., queue) based on a hop count in order to provide a fair transmission of packets based on their traveled distance (Ebata, paras. 7-8).

6. Further, Susnow does not disclose receiving the frames at a fibre channel switch element. Although, Susnow discloses an intermediate switch for receiving data according to a virtual lane (para. 29). Additionally, Ebata discloses queuing by hop count at an intermediary device (fig. 7). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to receive data at a switch and transmit the data based on a virtual lane assigned by hop

count in the invention of Susnow in order to provide a fair transmission of packets based on their traveled distance (Ebata, paras. 7-8).

7. Regarding claim 2, in Susnow credits are incremented/decremented when the frame is sent/received (para. 49).

8. Regarding claim 3, in Susnow there is a maximum credit (para. 78).

9. Regarding claim 4, in Susnow if all credits are used the next lane is selected (para. 71).

Claims 5-8 and 10-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Susnow et al. (US 2002/0159385) in view of Ebata (US 2003/0174652) and Stoevhase et al. (US 5,748,612).

10. Regarding claims 5, 8, 11, 13, 18 and 20, Susnow in view of Ebata discloses a method and apparatus (figs. 2 and 5-6) of processing frames as noted in the rejection of claim 1 above. However, Susnow in view of Ebata does not disclose sending primitives between ports. Stoevhase discloses sending VC_RDY primitives between ports (col. 7, lines 54-64). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to send primitives between ports in the invention of Susnow in order to control the flow of frames between the ports (Susnow, col. 7, lines 60-64).

11. Regarding claims 6-7, 12, 14-17, 19 and 21-24, these limitations have been address in the rejections of claims 2-4 above.

12. Regarding claim 10, in Susnow the virtual lanes may be assigned any appropriate number (fig. 3, item 346; para. 38, lines 22-24).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Harper whose telephone number is 571-272-3166. The examiner can normally be reached weekdays from 11:00 AM to 7:00 PM ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Trost, can be reached at 571-272-7872. The centralized fax number for the Patent Office is 571-273-8300. For non-official communications, the examiner's personal fax number is 571-273-3166 and the examiner's e-mail address is kevin.harper@uspto.gov.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications associated with a customer number is available through Private PAIR only. For more information about the PAIR system, see portal.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kevin C. Harper/

Primary Examiner, Art Unit 2616

December 21, 2008